

Survey of California Fetal Infant Mortality Review Programs

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Introduction

As part of our ongoing efforts to streamline the Fetal Infant Mortality Review (FIMR) process, Maternal, Child and Adolescent Health (MCAH) conducted a survey of FIMR Coordinators from January to March of 2007. This survey was intended to gather information about the structure of current FIMR programs, gaps in the FIMR process, and support and training needs. The valuable input and comments from the FIMR Coordinators have been duly noted, synthesized, and integrated into public document language for this report.

Local community support is the key component of successful FIMR activities. The FIMR process is tailored to fit the needs of individual communities and each local jurisdiction has the flexibility to address its specific issues.

Currently, the Baby Abstracting System and Information Network (BASINET) pilot continues in selected jurisdictions. We encourage the participating jurisdictions to use this system as much as possible. In the next few months, we will be examining the results of this pilot.

We hope that this document will be a useful resource for local health jurisdictions as they examine the current status of FIMR in their communities and seek support and ideas to enhance their programs. The time and effort taken by the FIMR Coordinators to respond to this survey are greatly appreciated.

Methods

A questionnaire was distributed by email or in person to all 17 FIMR Coordinators from January to March 2007 (see Appendix). Surveys were completed by telephone interview or in person. A draft of the survey report was distributed and feedback was obtained during the FIMR Workgroup of the MCAH Action Meeting on May 22, 2007. In addition, the draft was sent to all FIMR Coordinators by email for feedback, comments, and revisions as necessary.

Results

A. Number of Cases Reviewed Annually

Counties	Number of Cases Reviewed by Case Review Team 2005-06 ¹	Number of Cases Reviewed by Case Review Team 2003-04 ²	Number of Fetal and Infant Deaths 2004 ³	Fetal Mortality Rate 2004 (per 1,000 live Births) ³	Infant Mortality Rate 2004 (per 1,000 live births) ³	Number of African American Fetal and Infant Deaths 2004 ³	African American Fetal Mortality Rate 2004 (per 1,000 live births) ³	African American Infant Mortality Rate 2004 (per 1,000 live births) ³
Alameda	33	24	231	5.7	5.3	50	11.8	7.7
Contra Costa	28	19	127	5.7	3.8	20	10.0	*
Fresno	16	17	219	5.7	8.1	26	13.6	19.6
Humboldt	12	14	10	*	*	0	*	*
Kern	25	25	186	6.7	7.1	19	15.1	*
Los Angeles	150	-	1532	5.1	5.0	255	10.7	11.7
Placer	7	-	39	5.5	4.7	0	*	*
Sacramento	18	-	243	6.2	5.5	55	11.2	14.8
San Bernardino	10	20	385	5.2	6.9	74	9.1	18.7
San Diego	25	22	470	4.9	5.4	49	10.6	12.0
San Francisco	-	-	66	4.1	3.6	23	17.6	20.9
San Joaquin	15	12	163	8.0	6.7	24	11.9	17.9
Santa Barbara	18	-	63	5.6	4.5	1	*	*
Solano	10	3	54	6.1	3.3	15	16.8	*
Sonoma	21	20	51	6.0	2.5	1	*	*
Ventura	12	6	140	4.2	7.5	4	*	*
Yolo	7	2	18	4.6	*	0	*	*

¹Responses from Fetal Infant Mortality Review (FIMR) Survey Questionnaire. Empty spaces indicate unavailable data.

²From Annual Reports 2003-04 (to compare with 2004 data, which is the latest available). Empty spaces indicate unavailable data.

³2004 Resident Fetal and Infant Deaths and Resident Fetal and Infant Mortality Rates. Includes only those fetal deaths of 20 weeks or more gestation and missing gestation. *Rates not shown for fewer than 10 events.

Source: 2004 California Birth and Death Statistical Master Files.

B. Criteria for Choosing Cases to Review

Each jurisdiction has its own criteria for determining the cases to be reviewed.

Counties	Criteria
Alameda	Full term and fetal deaths, Sudden Infant Death Syndrome (SIDS) cases, Infants over 7 months old, Suspicious/unnatural deaths
Contra Costa	Maternal interview available, Race/Ethnicity, Unusual/sentinel cases, Try to achieve a balance of fetal, neonatal and postneonatal cases reviewed
Fresno	African American fetal and infant deaths
Humboldt	All fetal and infant deaths
Kern	African American fetal and infant deaths, SIDS cases, Babies of teen mothers
Los Angeles	All returned Los Angeles (LA) Health Overview of a Pregnant Event (HOPE) surveys. LA HOPE is a population-based survey that serves as a data collection tool for maternal interviews for the LA County FIMR program.
Placer	All fetal and infant deaths
Sacramento	African American fetal and infant deaths, Birth weight greater than 500 grams, Deaths caused by medical access/systems issues
San Bernardino	African American fetal and infant deaths
San Diego	African American fetal and infant deaths
San Francisco	
San Joaquin	Infant and fetal deaths with unusual circumstances, Request by hospital personnel, African American fetal and infant deaths
Santa Barbara	Fetal deaths, Third trimester deaths, Unusual cases
Solano	African American fetal and infant deaths
Sonoma	Perinatal Periods of Risk (PPOR) repeated annually using 5 years of data, including all fetal and infant deaths for which there is a death certificate, regardless of birth weight
Ventura	Unusual circumstances in mother's history
Yolo	Coordinator reviews all records; FIMR team reviews about 10 cases per year including all infant deaths. Fetal and neonatal deaths are reviewed based on concern for systems and access to care issues, as well as issues identified and prioritized from research data.

C. Members of Case Review Team (CRT) and/or Community Action Team (CAT)

Member	Alameda	Contra Costa	Fresno	Humboldt	Kern	Los Angeles	Placer	Sacramento	San Bernardino
Coroner			Yes	Yes		Yes	Yes	Yes	
Social Services		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hospitals	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BIH Staff	Yes	Yes	Yes		Yes			Yes	Yes
March of Dimes		Yes	Yes					Yes	Yes
Physician (specialty)		Family Practice, Pediatrician, Pathologist, Obstetrician	Obstetrician, Perinatologist, Pediatrician	Pediatrician	Obstetrician, Pediatrician, Pathologist		Assistant Health Officer, Pathologist	Obstetrician	Obstetrician, Medical Students & Residents
LD Nurse¹			Yes	Yes	Yes	Yes		Yes	Yes
PHN²	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Law Enforcement				Yes			Yes	Yes	
Foundation			Mommy Matters, Fresno Covenant, Spirit of Women			Public Health Foundation			
Advocacy Groups			Yes		Farm Bureau	Yes			Yes
Consumers	Yes					Yes			Yes
Domestic Violence		Yes			Yes	Yes			
Child Abuse Prevention					Yes	Yes	Yes		
Mental Health		Yes		Yes	Yes	Yes	Yes		
FQHC³		Yes			Yes				
Others (specify)	Clinic Representatives	Grief counselor		Family Resource Center, Regional Center for High Risk Infants	Medi-Cal, High School District	Health Educators, City Colleges, Job corps	Chaplain, Victims' Services, Emergency Services, Epidemiology, County council	BIH CAB*, Health Insurers, Medi-Cal, BIH Home Visitation, Epidemiology	Community partner (BIH subcontractor)

¹Labor and Delivery Nurse

²Public Health Nurse

³Federally Qualified Health Center

* Black Infant Health Community Advisory Board

C. Members of Case Review Team (CRT) and/or Community Action Team (CAT), continued

Member	San Diego	San Francisco	San Joaquin	Santa Barbara	Solano	Sonoma	Ventura	Yolo
Coroner		Yes	Yes		Yes		Yes	Yes
Social Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hospitals	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BIH Staff	Yes	Yes	Yes		Yes			
March of Dimes			Yes					
Physician (specialty)	Yes (No specialty listed)	Obstetrician	Obstetrician	Obstetrician, Pediatrician	Yes (No specialty listed)	Obstetrician, Pediatrician	Obstetrician, Neonatologist	Pediatrician, Obstetrician, Health Officer
LD Nurse¹	Yes	Yes	Yes		Yes	Yes	Yes	Yes
PHN²	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Law Enforcement			Yes	Yes	Yes	Yes		Yes
Foundation		Jelani House	Medi-Cal HMO, Family Resource and Referral					
Advocacy Groups	Yes	Yes	Yes		Yes			Yes
Consumers		Yes	Yes			Yes		Yes
Domestic Violence								Yes
Child Abuse Prevention						Yes		
Mental Health						Yes		
FQHC³						Yes		Yes
Others (specify)			AFLP ⁴ , Child Protective Services	Women's Health Center Director, MCAH Director	Managed Care, University	MCAH Director, AFLP ⁴ , AOD ⁵ counselor, PSC ⁶ , WIC ⁷ , Hospice Counselor	County MCAH Epidemiologist	Managed Care

¹Labor and Delivery Nurse

²Public Health Nurse

³Federally Qualified Health Center

⁴Adolescent Family Life Program

⁵Alcohol and Other Drug

⁶Perinatal Services Coordinator

⁷Women, Infants and Children Supplemental Nutrition Program

**D. Contributors to Fetal and/or Infant Death that have been Identified in your County
(The number in parenthesis indicates the number of local health jurisdictions that
mentioned the contributor):**

1. Substance Use (9)
2. Late/No Prenatal Care (8)
3. Prematurity (6)
4. Obesity (5)
5. Mental Health (5)
6. Infection (4)
7. Previous Fetal Loss (4)
8. Lack of Preconception/Interconception Care and Counseling (3)
9. Sudden Infant Death Syndrome (SIDS)/Sleep Environment (2)
10. Inadequate Education/Communication (2)
11. Domestic Violence (2)
12. Unaware of Services (2)
13. Lack of Coordination of Existing Programs (1)
14. Lack of Follow-Through from Providers (1)
15. Spontaneous Rupture of Membranes (1)
16. Cord Accidents (1)
17. Maternal Fatigue (1)
18. Accidental Falls (1)
19. Payment and Access to Services (1)
20. Lack of Provider Communication (1)
21. Homelessness (1)

E. FIMR Data in your County has been used to Propose and/or Implement:

	Alameda	Contra Costa	Fresno	Humboldt	Kern	Los Angeles	Placer	Sacramento	San Bernardino	San Diego	San Francisco	San Joaquin	Santa Barbara	Solano	Sonoma	Ventura	Yolo
Health Intervention	x	x	x	x	x	x		x	x	x		x	x				
Systems Change	x	x	x	x					x	x		x			x		x
Public Awareness Campaigns	x	x	x	x	x		x	x	x	x		x	x	x	x	x	x
Improvement of Existing Programs	x		x		x	x		x	x	x		x			x		
Prevention/Health Programs	x	x	x	x	x		x	x	x	x		x	x		x		x
Other (Specify)						Crisis Intervention, Support Groups for Mothers					Back to Sleep Program				Healthy Weight Initiative		

F. Has Any Intervention Impacted Infant Outcomes in your Community?

Most of the FIMR Coordinators pointed out that this is a hard question to answer and that they do not have the data or capacity to evaluate impact on infant outcomes. Some counties have relatively small numbers, making it difficult to assess outcomes. Answers to this question indicate that we need to further examine the FIMR evaluation process.

G. Gaps Identified in Services and Community Resources (The number in parenthesis indicates the number of local health jurisdictions that mentioned the item):

1. Substance Use Screening and Referral (6)
2. Communication Gap between Providers/between Providers and Services (5)
3. Prenatal Health Awareness/Education/ Clients' Lack of Understanding of Health Education (5)
4. Interpreters/Cultural Competency (3)
5. Lack of Funds for Services/Funding Sources (3)
6. Care Coordination (3)
7. Domestic Violence and Safety (Screening/Services) (2)
8. Lack of Transportation for Clients (2)
9. Mental Health Services (2)
10. Provider Knowledge of Services/Resources (2)
11. Grief/Bereavement Support (1)
12. SIDS Risk Surveillance/Education (1)
13. Case Closure/Postpartum Follow-up (1)
14. Family Planning (1)
15. Medical Standards of Care (1)
16. Comprehensiveness of Care (1)
17. Health Care Coverage (1)
18. Follow-up of Suspect Child Abuse Cases for which Child Protective Services does not open a case (1)
19. Lack of Follow-Through from Providers (1)
20. Lack of Funds for Prescriptions/Medications (1)
21. Lack of Family Support (1)
22. Clients' Use of Alternative/Herbal/Complementary Medicine (1)
23. Medical Authorization for Treatment (1)
24. Unavailability of Pediatric Provider Assistance for Neonatal Resuscitation in the Emergency Room (1)
25. Location of Services (1)
26. Provider Competency (1)
27. Awareness of Institutional Racism (1)
28. Lack of OB Physicians (1)

H. Has the FIMR data/process helped you identify necessary policy change(s)?

11 of the 17 FIMR Coordinators surveyed said that the FIMR process has helped them identify necessary policy change or that they are working on affecting policy change. If a policy change was enacted, multiple factors (e.g., data, case review team, and/or community action team input) contributed to bringing about the change.

Alameda: They have tried to visit every hospital to find out what policies are in place for substance use, fetal death, etc., in an effort to identify gaps and to come up with a standard protocol for addressing these issues.

Contra Costa: They established a protocol for SIDS risk reduction.

Fresno: Yes (No specifics given)

Humboldt: In order to address gaps in grief support for families experiencing a loss, a decision was made for Public Health Nursing to act upon all fetal and infant deaths by contacting the family and offering voluntary support services.

Kern: They have decided to implement the 4 P's Plus screening tool for perinatal substance use.

Los Angeles: In preconception health financing

San Bernardino: Yes (No specifics given)

San Diego: Yes (No specifics given)

Santa Barbara: Yes (In process)

Sonoma: 1) The Prenatal Care Missed Appointment Program affected policy change. In this program, a letter of inquiry is sent out to a client who has missed a prenatal care appointment. These clients are now referred to a public health nurse who makes a home visit.

2) The Perinatal Alcohol and Other Drugs Team provides a single telephone number for prenatal care providers to call for alcohol and other drug use assessments and assistance with treatment/placement options.

Ventura: They are attempting to affect policy change in direct services, e.g. in policies in the clinics.

I. Are you happy with how FIMR is being conducted in your county? Do you think anything should be changed with the current process?

12 of the 17 FIMR Coordinators surveyed were happy with the FIMR process in their communities. Suggestions for improving the FIMR process included:

1. More funding
2. Improving the thoroughness of case abstraction
3. Improving the maternal interview
4. More staff/support staff
5. State support (funding, forum for exchange of ideas)
6. More communication with partners, e.g. hospitals (not enough time/opportunity)
7. More CAT involvement/More community involvement
8. More medical participation
9. More communication among FIMR Coordinators
10. More administrative support (e.g., health officer support)
11. Investigation of mortality data trends
12. Need for an electronic database
13. More public awareness

J. Components of the Current FIMR Process used in your Health Department and Community

Component	Alameda	Contra Costa	Fresno	Humboldt	Kern	Los Angeles	Placer	Sacramento	San Bernardino
NFIMR Forms:								X	X
1) Prenatal Care Record								X	X
2) Maternal LDP Record								X	X
3) Newborn Assessment Record								X	X
4) Newborn ICU Record								X	X
5) Placental Exam Record								X	X
6) Ambulatory Infant Care Record								X	X
7) Pediatric ER and/or Hospitalization Record								X	X
8) Baby Home Supplement								X	
9) Maternal Interview	X	X	X	X	X	X	X	X	X
10) Case Review Summary									X
FIMR Issues Checklist	X	X		X	X		X	X	X
Others	Abstraction Form based on NFIMR Forms	CA FIMR Support Program Abstraction Form	Abstraction Form based on NFIMR Forms, Basinet	Abstraction Form based on NFIMR Forms	Modified NFIMR Forms to fit their needs	LA Hope Survey, Basinet	Narrative based on NFIMR Forms	Local Abstraction Forms, Basinet	Basinet
CRT Meeting	X	X	X	X	X	X	X	X	X
CAT Meeting	X		X		X	X		X	X

J. Components of the Current FIMR Process used in your Health Department and Community, continued

Component	San Diego	San Francisco	San Joaquin	Santa Barbara	Solano	Sonoma	Ventura	Yolo
NFIMR Forms:								
1) Prenatal Care Record					x			
2) Maternal LDP Record					x			
3) Newborn Assessment Record					x			
4) Newborn ICU Record					x			
5) Placental Exam Record					x			
6) Ambulatory Infant Care Record					x			
7) Pediatric ER and/or Hospitalization Record					x			
8) Baby Home Supplement								
9) Maternal Interview			x	x	x	x	x	x
10) Case Review Summary					x			
FIMR Issues Checklist	x		x	x	x	x	x	x
Others	Abstraction Form based on NFIMR Forms, Basinet	Basinet	Abstraction Form based on NFIMR Forms, Basinet, Narrative to CRT	Abstraction Form based on NFIMR Forms except PER*, Law Enforcement Form	Public Health Nursing Evaluation Form, Basinet	Narrative based on NFIMR Forms	Abstraction Form based on NFIMR forms	Abstraction Form based on NFIMR forms
CRT Meeting	x		x	x	x	x	x	x
CAT Meeting	x		x		x	x	x	x

* Placental Exam Record

K. Time Spent by FIMR Coordinator

	FIMR Coordinator FTE	Other FTE
Alameda	0.25	0.25 Nurse Abstractor
Contra Costa	1.00	1.00 Interviewer/Case Manager, 0.25 Program Manager, 0.05 Medical Records Abstractor
Fresno	1.00	
Humboldt	0.40	
Kern	0.10	0.75 Perinatal Investigator/Abstractor
LA	1.00	0.25 Research Analyst, 0.25 Epidemiologist
Placer	0.35	0.25-0.30 Nurse Abstractor
Sacramento	0.10	0.08 PHN Home Visitor, 0.10 Volunteer Nurse/Physician Abstractors
San Bernardino	0.50	
San Diego	0.375	
San Francisco	0.25	
San Joaquin	0.50	
Santa Barbara	0.15	0.03-0.06 PHN
Solano	0.50	
Sonoma	0.25	0.10 Office Assistant
Ventura	0.05	0.25 Nurse
Yolo	0.30	

Non-Title V Funding and Source:

9 of the 17 counties surveyed answered that they used county funds and/or grants. One used some in-kind support from community organizations. One mentioned Child Protective Services as a non-Title V funding source.

L. Perinatal Periods of Risk (PPOR)

The following local health jurisdictions use the PPOR Approach:

- 1) Sacramento (Phase II)
- 2) San Bernardino (Phase II)
- 3) San Diego (Phase II)
- 4) San Francisco (Phase I)
- 5) San Joaquin (Phase I)
- 6) Solano (Phase I)
- 7) Sonoma County (Phase I and II)

M. Combined or Separate CRT and CAT

CRT/CAT	Combined	Separate
Alameda		x
Contra Costa		CRT only
Fresno		x
Humboldt	x	
Kern	x	
LA		x
Placer		CRT only
Sacramento		x
San Bernardino		x
San Diego		x
San Francisco		x
San Joaquin		x
Santa Barbara		CRT only
Solano		x
Sonoma	x	
Ventura	x	
Yolo	x	

Contra Costa, Placer, and Santa Barbara Counties have no CAT. They work with community organizations and/or form task forces to accomplish the community action component.

N. Comments/Suggestions:

1. The state should create a standardized electronic database/data tracking system. FIMR programs do not seem to be on the same page with regard to goals. Technical assistance would be helpful since funding is limited.
2. Some parts of the MCAH Annual Report Form are repetitive (e.g., Form 9 and the vignette). The FIMR tracking log form also asks for the same information.
3. State coordination and state meetings, as well as regular teleconferences, would be helpful for exchange of ideas. A state strategic plan would be helpful for guidance.
4. Educational campaigns sponsored by the state may be helpful for local health jurisdictions.
5. The FIMR Coordinators would appreciate the state's sharing of county-specific data, if available.
6. More county/community involvement would be helpful.
7. Comments regarding state requirements included: a) Completing the review of the required number of cases may take away time from completing the maternal interview (an important part of the review process) for some cases; b) Requirements may not be met if only African American fetal and infant deaths are used for case selection; and c) The time frame may not be enough to meet state requirements.

Appendix: Survey Instrument

FIMR Survey

A. Number of cases reviewed each year _____

B. Criteria for choosing cases to review (e.g., types of death, age of death: fetal, neonatal, infant)

C. Members of your Case Review Team (CRT) and/or Community Action Team (CAT)

- | | |
|---|---|
| <input type="checkbox"/> Coroner | <input type="checkbox"/> Physician (please specify specialty) _____ |
| <input type="checkbox"/> Social Services | <input type="checkbox"/> Labor & Delivery Nurse |
| <input type="checkbox"/> Hospitals | <input type="checkbox"/> Public Health Nurse |
| <input type="checkbox"/> BIH Coordinator/Staff | <input type="checkbox"/> Law Enforcement |
| <input type="checkbox"/> March of Dimes | <input type="checkbox"/> Foundation (please specify) _____ |
| <input type="checkbox"/> Consumers | <input type="checkbox"/> Advocacy groups |
| <input type="checkbox"/> Other (please specify) _____ | |

D. Contributors to fetal and/or infant death that have been identified in your county (e.g., obesity, late or no prenatal care, maternal mental health)

E. FIMR data in your county has been used to propose and/or implement

- | | |
|---|---|
| <input type="checkbox"/> Health Intervention(s) | <input type="checkbox"/> Public Awareness Campaigns |
| <input type="checkbox"/> Systems Change | <input type="checkbox"/> Prevention/Health programs |
| <input type="checkbox"/> Improvement of Existing Programs | <input type="checkbox"/> Other (please specify) _____ |

F. Has any intervention impacted infant outcomes in your community? _____

G. Gaps identified in services and community resources (e.g., mental health services, substance abuse screening) _____

H. Has the FIMR data/process helped you identify necessary policy change(s)? _____

If so, what contributed to this decision (e.g. data, case review team, community action team)?

I. Are you happy with how FIMR is being conducted in your county? ____ **Do you think anything should be changed with the current process?** _____

J. Which components of the current FIMR process are used in your health department and your community?

NFIMR Forms:

- | | |
|---|--|
| <input type="checkbox"/> Prenatal Care Record | <input type="checkbox"/> FIMR Issues Checklist (MCAH |
| <input type="checkbox"/> Maternal LDP Record | Annual Report Form) |
| <input type="checkbox"/> Newborn Assessment Record | <input type="checkbox"/> Case Review Team Meeting |
| <input type="checkbox"/> Newborn ICU Record | <input type="checkbox"/> Community Action Team Meeting |
| <input type="checkbox"/> Placental Exam Record | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Maternal Interview | |
| <input type="checkbox"/> Ambulatory Infant Care Record | |
| <input type="checkbox"/> Pediatric ER and/or Hospitalization Record | |
| <input type="checkbox"/> Baby Home Supplement | |
| <input type="checkbox"/> Case Review Summary | |

K. Time Spent? ____ **FTE?** ____ **Non-Title V funding & source** _____

L. Perinatal Periods of Risk Approach

☐ Yes ☐ No ☐ Phase I Analysis ☐ Phase II Analysis How often _____

How do you use this information? _____

M. Combined or Separate CRT and CAT? _____

If no CAT, how do you accomplish the community action component? _____
